Release Notes: MAG 3.5.0

v3.5.0 - released August, 2014

- WCOSS output changes
    - HRRR implementation:
        - 15 products available hourly and 5 products available sub-hourly (every 15min).
        - 3 regions: EAST-US, WEST-US and CENT-US
        - Three sizes for each product: small, medium, and large.
        - ecFlow updates for HRRR:
            - mag_processor/hrrr contains two processes:
                - mag_hrrr_processor - creates the hourly products
                - mag_hrrrsubh_processor - creates the sub-hourly products
            - mag_send2web/hrrr - contains one process:
                - ecmag_sync_hrrr, triggered by event from mag_hrrr_processor
        - JSNDMAG2WEB has been updated with some HRRR-specific code to ensure that both hrrr-subh and hrrr have completed before removing the “go” files and exiting.
    - The development ecFlow suite has now been updated to be configured the same as the production ecFlow suite.
    - WCOSS resource info
        - Increase of 15GB per day for images in both WCOSS and RZDM image directories.
        - Also increase 15GB per day network data usage on rsync transfer jobs between WCOSS and RZDM systems.
- Web tier code changes:
    - XML and Web page change to allow MAG Web site to display HRRR products.
    - Add ability to display sub-hourly produced images.

Implementation instructions:

1. Download mag.v3.5.0 from svn tag to /nwprod
   https://ncosvn.ncep.noaa.gov/usvn/svn/sib-wcoss-mag/tags/mag.v3.5.0_prod/

2. Notify the MAG development team when the implementation is to occur in order to coordinate updates to the web code on the rzdm concurrent with the implementation.

3. Update /nwprod/versions/mag.ver to 3.5.0

4. Create new ecFlow jobs for HRRR:
   a. Copy over new defs/mag.defs
   b. Copy over ecf files for MAG_processor: scripts/mag/mag_processor/hrrr
   c. Copy over ecf files for send2web: ecfnets/scripts/mag/mag_send2web/hrrr
   d. Reload the suites

Known Issues

Rsync jobs stay alive waiting for the last forecast hour, until it times out.

This is because situation arise when the processing job stay in job queue for a long time. SIB team is working on solution to better safeguard and handle the exception.

Reprocessing of Tropical model files

A situation arises with the Tropical model processing that can result in storm model data being reprocessed, so a storm would reappear on MAG after it has been purged.

The GEMPAK grid files (in /com/nawips/prod) are retained for 10 days. The MAG status files (in /com/mag/prod/status) are purged by exmag_cleanup_prod.sh.ecf after 3 days. These status files are used by the MAG_processor.pl and MAG_processor_hurr.pl to determine which cycles/forecast hours have already been processed. Since the MAG processor script will always try to process the last two cycles that exist (it doesn't check how old they are), if the GEMPAK files are still there after the status files have been purged, it will try to reprocess the last two cycles.

The easiest solution is to update the cleanup script to keep 10 days of all status files. Or only the hurricane model type status files (hwrf-full, hwrf-nested, ghm-full, and ghm-nested), since those are the only ones that are run irregularly. Or the cleanup script could access the same table used to purge the /com/nawips/prod directory to match the cleanup of the status files to the GEMPAK files.

Page cache issue

There was a typo in get-banner.php that supposed to turn off the in-browser cache. As the result

of that, all images are been cached in client browser. For example if there is an update to the same image from RZDM, the Web browser will still show old image until cache expired or manually refresh the page. This issue will apply across all pages include individual image display and image looping.

SVN TAG

NCOSVN TAG Location

The MAG v3.5.0 Web tier is in https://ncosvn.ncep.noaa.gov/usvn/svn/sib-mag/tags/MAGv350
The MAG v3.5.0 WCOSS tier is in
https://ncosvn.ncep.noaa.gov/usvn/svn/sib-wcoss-mag/tags/mag.v3.5.0_prod